

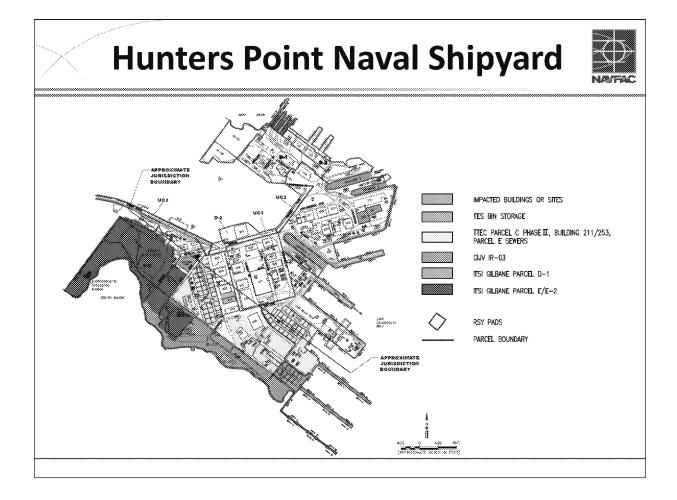
Parcel D-1 Phase II Rad Update

Hunters Point Naval Shipyard BCT Meeting January 15, 2015

Parcel D-1 Phase II Presentation Overview



- Radiological Site Background and Impacted Areas
- Original Scope to Achieve Radiological Free Release
- Parcel D-1 Phase II Field Activities and Findings
- Planned Additional Work
- Revised Reporting Schedule



Radiological Site Background for Parcel D-1 Phase II



Former National Radiological Defense Laboratory (NRDL) Area

Rectangular area was hand drawn on a 1949 map of HPNS showing locations that the NRDL occupied. The former uses is unknown but possibly an outside storage area to support the research being performed by NRDL.

Ship Berths (14, 21, 22, and 29)

Berthing of OPERATION CROSSROADS ships and NRDL usage.

Sanitary Sewer/Storm Drain Lines

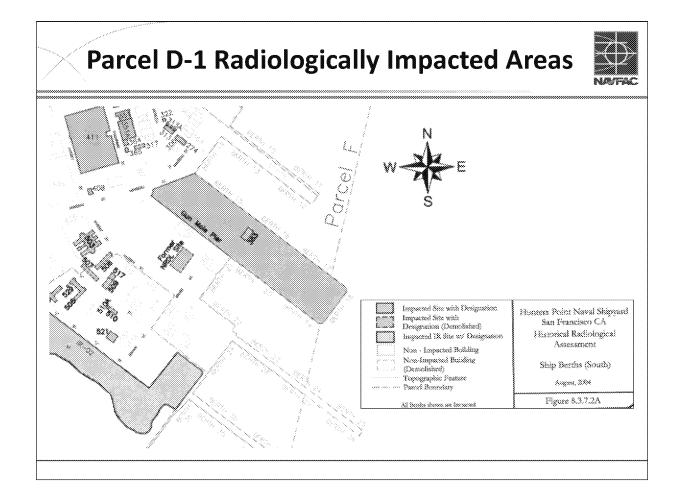
Radiological contamination entered the SS/SD system through drains from various radiologically impacted buildings across the base.

Railroad Ties Staged in Parcel D-1

Removed from South Pier and Gun Mole Pier during radiological remediation activities and possibly radiologically impacted.

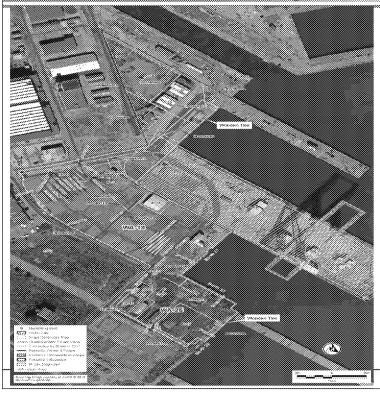
Radiological Screening Yard (RSY) 2

One of several screening pad areas built by the Navy to process radiologically impacted soil from various areas across the base under the Basewide RAD TCRA.



Parcel D-1 Phase II Original Scope to Achieve Radiological Free Release





- Removal, surveying, and remediation of 5,455 LF of sanitary sewer and storm drain (SS/SD)
- Radiological surveying and/or remediation of the NRDL Site and Ship Berths (14, 21, 22, and 29)
- Removal of Radiological Screening Yard (RSY) 2 pads
- Radiological surveying and waste disposal of railroad ties

The former NRDL site is approximately 300 ft (100 m) north-northwest of Berth 21. The Naval Radiological Defense Laboratory (NRDL) was established with the original mission of supporting the decontamination efforts on OPERATION CROSSROADS ships. Consequently, it is a potential storage site of OPERATION CROSSROADS material. Currently, the site is an open area.

Parcel D-1 Phase II Field Activities







Excavation of SS/SD

Rail Ties staged for GWS



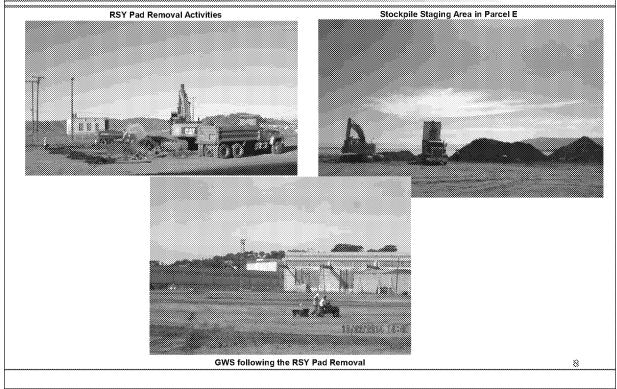


Excavation of SS/SD

Rail Ties Staged for T/D

Parcel D-1 Phase II Field Activities





Parcel D-1 Phase II Findings



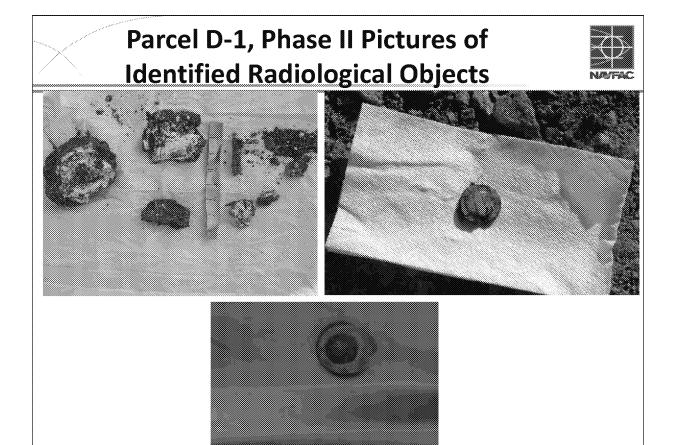
- 1. To date, the Navy has identified and retrieved a total of nine (9) radiological objects across the Parcel D-1, Phase II area:
 - Two (2) from trench soil units during removal and surveying of the SS/SDs
 - Unknown depth (identified on RSY pads after excavation of trench soils)
 - Four (4) from the former NRDL site
 - 4" to 36" below ground surface (bgs)
 - Three (3) from the southern block of Parcel D-1
 - 0.5" to 24" bgs
- 2. In addition, during the final gamma walkover survey (GWS) following the RSY-2 pad removals, gamma readings that may potentially be from Ra-226 activity were identified in the footprints of former RSY pads D11, D12, D18, and D19.

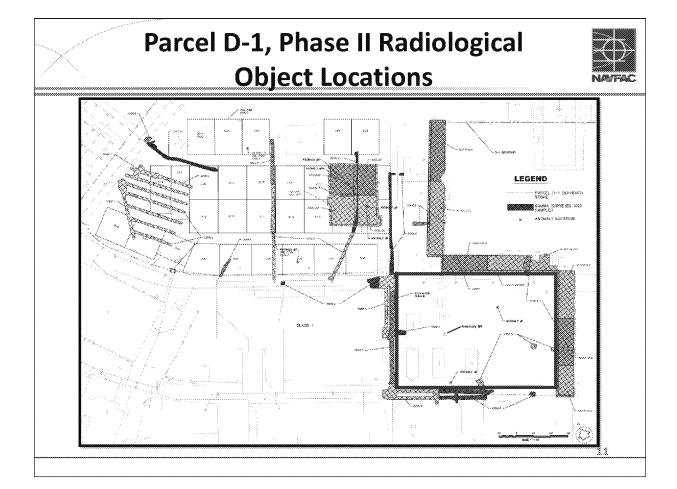


The Navy has determined that additional investigation and surveys are needed to further explore these findings.

Identified and removed 9 anomalies -remediated (emphesize)

Final GWS analysis of the analysis of it based on what ctr told us.. As soon as we have something reportable What s the issue? Unforseen site conditions...





Print 11 x 17
Hunters Point Naval Ship Yard, BCT, Dec-2-10

Planned Additional Work for Parcel D-1, Phase II



To address elevated gamma readings on RSY-2 Pads:

- Conduct a more thorough background analysis of data to help ascertain where an anomaly may be present subsurface.
- Investigate anomalous gamma readings using gamma hand scanning instruments (NaI 2"x2" gamma scintillator) and hand tools to determine the source and depth.
- Excavate and remediate all positively identified anomalies and surrounding area.

To address objects found in southern block of Parcel D-1:

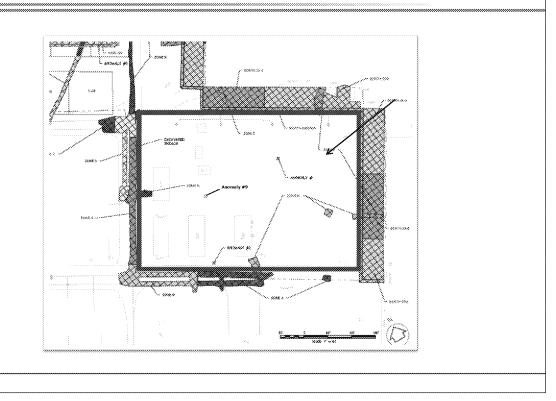
- Conduct 100% GWS of southern block to identify the presence of any other surface devices.
- Conduct similar analysis of data as described above.
- Excavate and remediate all positively identified anomalies and surrounding soil.

We think a lot of it serpentinite

Dredge material Different gamma signatures.

Southern Block of Parcel D-1 Planned Additional GWS





Revised Reporting Schedule Parcel D-1, Phase II Reporting



- Draft Parcel D-1 Ship Berths FSS Report June 2015
- Draft Parcel D-1 NRDL FSS Report June 2015
- Draft Parcel D-1 Phase II RACR Fall 2015

8.3